

CLAIMS

I claim

1. an improved feed port for a pneumatic projectile device comprising;

a moveable feed port aperture attached to a pneumatic projectile device, which can be moved to different positions , and through which projectiles can be introduced to the breech of the projectile device, comprising;

a aperture of sufficient size to allow the freely flowing introduction of projectiles from an external source

a means for moving the location of the aperture,

a means for retaining the aperture in a fixed position.

2. the device of claim one in which the moveable aperture is built into a housing which is attached to a pneumatic projectile device comprising:

a housing having a front end, a rear end, a main longitudinal passageway through which projectiles can be fired with a first opening at its front end, a second opening at its rear

end and a aperture in the side of said passageway through which projectiles can be introduced to said passageway;

a means for moving said housing;

a means for retaining said housing in a fixed position;

a pneumatic projectile device containing;

a breech having a front end, a rear end, a main longitudinal passageway with a first opening at its front end, and a second opening in said passageway for entry of compressed gas into said passageway;

passage means for supplying compressed gas from a source thereof to said second opening;

a gun handle connected to said receiver;

a barrel through which said pellets or balls are fed connected to said front end of said breech;

a bolt or other means for moving the ball or pellet from the breech into the barrel, the operation of said bolt actuated by the trigger mechanism, the valve mechanism or other

mechanical, pneumatic or electronic mechanism which can be actuated by the operation of the trigger;

a valve actuating mechanism mounted in said receiver, capable of opening a gas valve mounted in said receiver upon demand;

a gas valve system, said system including a sealed gas passageway connected to said second opening and being constructed to release compressed gas in order to fire a pellet or ball when said valve actuating mechanism is activated;

a trigger mounted to a lower portion of the breech, said trigger having a means for operating said valve actuating mechanism;

means for returning said trigger to a forward position upon release of the trigger, and;

a means for sealing the opening in the side of the longitudinal passageway of said housing upon activation of the valve mechanism

3. the improved feed port of claim one wherein

the moveable feed port is attached to the forward portion of the receiver between the receiver and the barrel,

the rear end of said housing having a means for attachment to said receiver front
end

the front end of said housing having a means for attachment of said barrel

The housing having a substantially circular passageway longitudinally connecting the front
end and rear end,

an aperture in the side of said passageway through which pellets or balls can be introduced
to said passageway

a means for moving the housing and the relative location of the side aperture

a means for retaining the aperture in a fixed position

4. the improved feed port of claim one wherein

the aperture in the side of the longitudinal passageway of the housing has a tubular
element of variable length attached either in a temporary or permanent manner;

said tubular element comprising a body with a substantially circular passageway with a
opening at its front end and a opening at its rear end, the opening at its rear end being in

communication with the opening in the side wall of the housing, such that pellet or balls may freely move between the tubular element and the longitudinal passageway of the housing

5. the improved feed port of claim one wherein:

the feed port housing incorporates a means for selectively fixing or unfixing the location of the feed port aperture, said means being a collet, a set screw, a latch arm or similar device

6. An improved feed port wherein:

the improved feed port is comprised of a series of apertures created in the receiver body of said pneumatic projectile device placed at intervals around the receiver body, said apertures comprising;

a opening at its front end and a opening at its rear end, said openings connected by a passageway of sufficient length to extend from the opening at its first end located externally on the body of said receiver and the opening at its rear end, the rear end opening being in communication with the bore of said receiver, the front and rear openings and the passageway of sufficient diameter to allow the introduction of pellets or balls from an external source into the breech of said receiver,

a means for attachment of an external device located within or adjacent to said front end opening and,

a means for sealing one or more of said openings.

7. An improved feed port attached to the body of a pneumatic projectile device barrel, comprising;

A pneumatic projectile device barrel with an opening at its front end, an opening at its rear end and a substantially circular longitudinal passageway, through which projectiles can be fired connecting said front and rear ends,

A means for attaching the barrel to said pneumatic projectile device at its rear end, such as threads located on its exterior surface,

An aperture in the side of said barrel through which projectiles can be introduced,

A means for retaining the barrel in a fixed position, such as a set screw or collet,

8. An improved feed port moveably attached to and integrated into the design of a pneumatic projectile device, said feed port comprising;

a moveable aperture attached to a pneumatic projectile device, comprising;

a housing having a front end, a rear end, a main longitudinal passageway through which pellets or balls can be fired with a first opening at its front end, a second opening at its rear end and a opening in the side of said passageway through which pellets or balls can be introduced to said passageway;

a means for moving said housing;

a means for retaining said housing in a fixed position;

a pneumatic projectile device receiver containing;

a breech having a front end, a rear end, a main longitudinal passageway with a first opening at its front end, and a second opening in said passageway for entry of compressed gas into said passageway;

passage means for supplying compressed gas from a source thereof to said second opening;

a gun handle connected to said receiver;

a barrel through which said pellets or balls are fed connected to said front end of said breech;

a bolt or other means for moving the ball or pellet from the breech into the barrel, the operation of said bolt actuated by the trigger mechanism, the valve mechanism or other mechanical, pneumatic or electronic mechanism which can be actuated by the operation of the trigger;

a valve actuating mechanism mounted in said receiver, capable of opening a gas valve mounted in said receiver upon demand;

a gas valve system, said system including a sealed gas passageway connected to said second opening and being constructed to release compressed gas in order to fire a pellet or ball when said valve actuating mechanism is activated;

a trigger mounted to a lower portion of the breech, said trigger having a means for operating said valve actuating mechanism;

means for returning said trigger to a forward position upon release of the trigger, and;

a means for sealing the opening in the side of the longitudinal passageway of said housing upon activation of the valve mechanism

an opening in the side of the longitudinal passageway of the housing with a tubular element of variable length attached either in a temporary or permanent manner;

said tubular element comprising a body with a substantially circular passageway with a opening at its front end and a opening at its rear end, the opening at its rear end being in communication with the opening in the side wall of the housing, such that pellet or balls may freely move between the tubular element and the longitudinal passageway of the housing

a means for selectively fixing or unfixing the location of the feed port opening, said means being a collet, a set screw, a latch arm or similar device